

IN THE CLAIMS:

Claims 1-25 (canceled)

26. (Currently Amended) A method of filling an endodontically prepared root canal of a tooth comprising:

applying filler material to the external surface of a distal portion of an elongated structural shaft, the shaft having sufficient rigidity to serve as a vehicle for carrying said filler material into lowermost portions of a root canal;

inserting said proximal portion of said shaft having said filler material thereon into the root canal; and

applying a beam of energy to said shaft ~~at a frequency sufficiently high to heat said shaft and~~ cause the surface tension of said filler material to substantially decrease to cause said filler material ~~and said shaft distal portion~~ to fill the root canal ~~or optionally to~~ and allow said shaft to be removed leaving said filler material ~~alone~~ in the root canal.

27. (Currently Amended) A method according to Claim 26 including:

affixing a signal generating temperature sensor to said shaft and using a signal generated by said temperature sensor to control said application of ~~sound~~ said beam of energy to said shaft.

28. (Previously Presented) A method according to Claim 26 wherein said shaft is of metal.

29. (Previously Presented) A method according to Claim 26 wherein said shaft is of plastic or fiberglass.

30. (Cancelled)

1 31. (Currently Amended) A method according to Claim 26 wherein said step of applying a  
2 beam of energy to said shaft is accomplished by employing ~~piezoelectric~~ sonic energy.

1 32. (Currently Amended) An obturator system for filling an endodontically prepared tooth  
2 root canal comprising:

3 an elongated shaft having a proximal portion and a smooth distal portion;

4 filler material applied onto said shaft distal portion, said shaft having sufficient  
5 rigidity to serve as a vehicle for carrying said filler material thereon into the lowermost  
6 portions of a tooth root canal; and

7 a source providing a beam of energy that is applied to said shaft ~~at a frequency~~  
8 ~~sufficiently high to cause to heat said shaft so to vibrate at a rate that thereby the surface~~  
9 ~~tension of said filler material is substantially decreased to cause said filler material and~~  
10 ~~said shaft distal portion to fill the root canal or optionally to allow said shaft to be~~  
11 removed leaving said filler material in the root canal.

1 33. (Cancelled)

1 34. (Currently Amended) An obturator system according to Claim 32 wherein said source of  
2 energy ~~employs piezoelectric~~ provides sonic energy.

1 35. (Previously Presented) An obturator system according to Claim 32 wherein said source  
2 of energy is a laser.

1 36. (Cancelled)

1 37. (Previously Presented) An obturator system according to Claim 32 including a signal  
2 generating temperature sensor affixed to said shaft.

1 38. (Currently Amended) An obturator system according to Claim 37 including:  
2 circuitry including said temperature sensor by which said ~~source~~ beam of energy  
3 is controlled in response to the temperature of said shaft.

1 39. (Cancelled)

1 40. (Cancelled)

1 41. (Cancelled)

1 42. (New) A method according to Claim 26 wherein said step of applying a beam of energy  
2 to said shaft is accomplished employing electromagnetic energy.

1 43. (New) An obturator system for filing an endodontically prepared tooth root canal  
2 comprising:

3 an elongated heat conductible shaft having a proximal portion and a smooth distal  
4 portion;

5 filler material applied onto said shaft distal portion, said shaft having sufficient  
6 rigidity to serve as a vehicle for carrying said filler material thereon and compact the  
7 filler material into the lowermost portions of a tooth root canal and;

8 an energy radiation generator positioned adjacent said shaft distal portion  
9 whereby said shaft may be heated by radiated energy to reduce surface tension of said

10        filler material permitting said shaft to be removed to leave said filler material compacted  
11        in said root canal.

1    44.    (New) An obturator system according to Claim 43 including:  
2                a signal generating temperature sensor affixed to said shaft.

1    45.    (New) An obturator system according to Claim 43 including:  
2                circuitry attached to said temperature sensor employed to control said energy  
3                radiation generator.

1    46.    (New) An obturator system according to Claim 43 wherein said energy radiation  
2                generation generates electromagnetic energy.

1    47.    (New) An obturator system according to Claim 43 wherein said energy radiation  
2                generator generates sonic energy.

1    48.    (New) An obturator system according to Claim 43 wherein said energy radiation  
2                generator is a laser.

1    49.    (New) An obturator system according to Claim 43 wherein said energy radiation  
2                generator transmits a beam of energy that impinges on said shaft.